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REMARKS

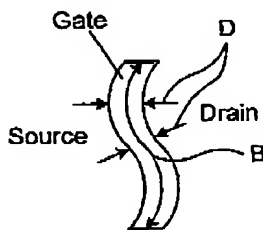
A. Claim Rejections - Claims 2 and 4-7

Claims 2 and 4-7 have been rejected under 35 U.S.C. § 102(b) or, in the alternative, under 35 U.S.C. § 103(a) over U.S. Patent No. 6,229,163 to Calafut. Claims 2 and 5 have been amended. Consistent with the amendment to claim 2, claim 7 has been canceled.

Independent claim 2 is directed to a FET type transistor where a gate electrode has a non-linear structural characteristic that is imparted from a photo-resist feature that has the non-linear characteristic. As claimed, the characteristic is selected to provide mechanical stability to the photo resist feature.

Additionally, a length of the channel has a generally constant dimension when measured from any point from the source to the drain in a perpendicular direction to a widthwise bisector of the gate electrode. As is known in the art, the length of a microdevice is the direction from source to drain (e.g., along the channel) and the width is a direction perpendicular thereto.

To assist understanding of the claim, a portion of figure 3 is reproduced below. In this example, D represents the channel length and B represents the bisector, and the labels for the gate, source and drain have been added. In this example, the non-linear structural characteristic is an "S" shape.



In contrast to the claimed features of a microdevice, Calafut discloses shaping a gate 30 using fractal analysis to increase an aspect ratio of the gate (column 3, lines

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49-61). For each side of an original rectangular initiator 24, the resulting structure has plural segments 26 that conform to the fractal approach dictated at column 5, line 66 to column 6, line 26. The resulting fractal-based gate does not derive a non-linear structural component that was specifically selected to provide mechanical stability to a corresponding photo resist feature.

In addition, Calafut does not teach or reasonably suggest a device that has a channel length with a substantially constant dimension when measured at any point from the source to the drain in a perpendicular direction to a widthwise bisector of the gate electrode. To illustrate the lack of this feature, figure 9 from Calafut is reproduced below. Added to the figure are labels for each device component including the channel corresponding to reference number 29. Also added are pairs of points (points a/b and points c/d) that exemplify the non-constant channel lengths of Calafut that result from the fractal based gate geometry to increase aspect ratio.

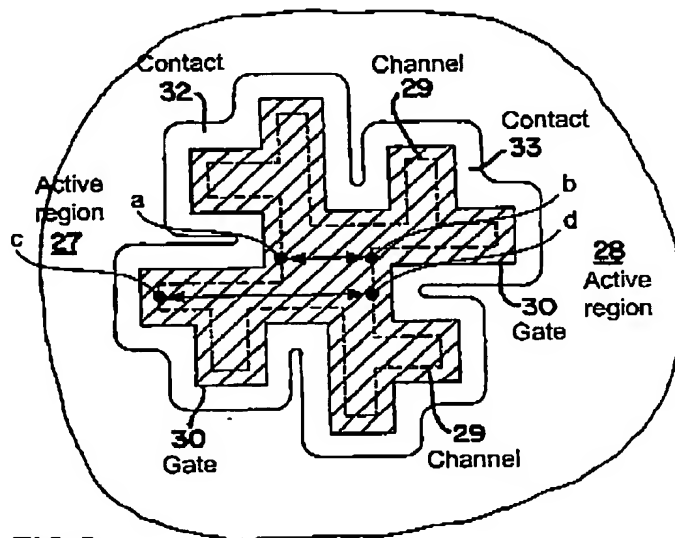


FIG 9

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As should be readily apparent, Calafut does not anticipate the subject matter of claim 2. Since substantial unmotivated changes to the teachings of Calafut would be required to arrive at the subject matter of claim 2, Calafut does not render claim 2 obvious.

Claims 4-7 depend from claim 2 and are patentable for at least the same reasons. In addition, these claims recite additional novel and unobvious features of the invention. For example, claim 5 recites that the non-linear feature is a tab that does not form part of a gate electrode portion of the channel region controlling component.

With respect to claim 6, it is believed that Examiner has misinterpreted what the Applicants mean by "deconstructive patterning." In deconstructive patterning, a feature is formed and then repatterned to remove an undersired portion(s) of the feature as explained in more detail at page 12, lines 6-21.

Accordingly, reconsideration and withdrawal of the rejection of claims 2 and 4-7 is respectfully requested.

B. Claim Rejections - Claims 3 and 8-12

Claims 3 and 8-12 have been rejected under 35 U.S.C. § 103(a) over Calafut. Claim 3 depends from claim 2. Claims 8-9 and 11 have been canceled. Claim 10 has been amended to depend directly from claim 2. Claim 12 has been amended to depend from new independent claim 22.

Claims 3 and 10 are allowable for at least the reasons set forth above with respect to claim 2. Accordingly, reconsideration and withdrawal of the rejection of claims 3 and 8-12 is respectfully requested.

C. New Claims

Claims 22-27 have been added. Claim 22 is directed to a novel and unobvious memory device that includes a word line having a non-linear structure characteristic derived from a photo mask feature having the non-linear characteristic that was selected to impart mechanical stability to the photo resist feature. Also, the word line

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defines substantially the same channel length to each channel and has a displacement along the longitudinal axis of the word line. An example of these features of the invention can be found in figures 5 and 6 of the application and the associated descriptions.

D. Conclusion

In light of the foregoing, it is respectfully submitted that the present application is in condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned representative to expedite prosecution of the present application.

If there are any fees resulting from this communication, please charge same to our Deposit Account No. 18-0988, our Order No. H1710.

Respectfully submitted,

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